Defect Information Report

(Section 573.6) **FL-870**

Date of Submission: December 16, 2020

Manufacturer: Daimler Trucks North America LLC

P.O. BOX 3849

Portland, Oregon 97208

Vehicle Information

Model Yr. Start: 2021 Model Yr. End: 2021

Make: Thomas Built Buses
Model: Saf-T-Liner C2 Jouley

Production Dates: Begin: 12/11/2019 End: 08/04/2020

Type: Buses, Medium & Heavy Duty Vehicles

Descriptive Information:

Electric School Buses equipped with a suspect Electronic Control Unit (ECU) configured with Hill Start Assist.

Number potentially involved: 28 Estimated percentage of involve with defect: 100%

Defect / Noncompliance Description

For this Defect/Noncompliance:

Describe the defect or noncompliance:

On the affected vehicles, if the service brake pedal is pressed and then released while the park brake is engaged, the Hill Start Assist function of the service brake in combination with the anti-compounding function of the vehicle may release the parking brake for up to 3 seconds

If a noncompliance, provide the applicable FMVSS:

121 - Air Brake Systems

Describe the safety risk:

FMVSS 121 S5.6.4 requires the park brake controls be separate from service brake controls, but in this situation, the non-compounding brake feature of the vehicle in combination with Hill Start Assist will disengage the park brakes when the service brake pedal is pressed and released. This disengagement of the park brakes may be unexpected with a low level of service brake engagement. An unexpected disengagement of the parking brake without continual application of the service brake may allow the vehicle to roll freely, increasing the risk of a vehicle crash.

Identify any warning which can precede or occur: NA



If applicable, identify the manufacture of the defective or noncompliant component: ZF WABCo

Involved Components

Component Name: Electronic Control Unit (ECU)

Component Description: ECU-ESC,4S4M,E4.9,PRGRM,HSA

Component Part Number: WAB400 862 902 0

Chronology of Defect / Noncompliance Determination

Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.:

December 2020, potential disengagement of the parking brake after service brake application was identified, when DTNA Engineering was performing a vehicle test. DTNA notified the supplier of the findings. The supplier provided feedback of current parameters and activation sequence of Hill Start Assist. DTNA began an investigation of the issue, including the population, warranty, and regulation review and failure mode replication. Further review indicated a potential non-compliance to FMVSS 121 S.5.6.4 of park brake and service brake isolation. December 10, 2020, DTNA decided to conduct a voluntary non-compliance recall on certain school buses equipped with certain ECU and software versions.

Identify the Remedy

Describe the defect/noncompliance remedy program, including the manufacture's plan for reimbursement.

Vehicles will receive an updated software version onto the ECU. Repairs will be performed by Daimler Trucks North America authorized service facilities. Details of the reimbursement plan will be included in the owner's notification letter.

Identify the Recall Schedule

Describe the recall schedule for notifications.:

Customer notification will be made by first class mail using Daimler Trucks North America records to determine the customers affected.

Planned Dealer Notification Begin Date:02/13/2021Planned Dealer Notification End Date:02/13/2021Planned Owner Notification Begin Date:02/13/2021Planned Owner Notification End Date:02/13/2021

Manufacture's identification code for this recall (if applicable): FL-870

DTNA Representative;

Larissa Stoffels

Executive Manager, Vehicle Safety Compliance and Regulatory Affairs